

Abstract

A reconfigurable chip using reconfigurable functional units is modified to better implement linear feedback shift registers. The reconfigurable functional unit has its input multiplexer unit modified so that it can select a combined value. The combined values include some of the bits from the output of the reconfigurable functional unit as well as carry bit from another reconfigurable functional unit. This can significantly reduce the space required to implement linear feedback shift registers which are useful in many digital communication systems.

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